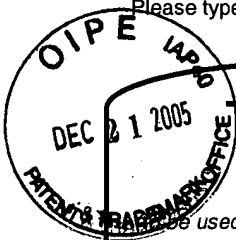


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# TRANSMITTAL FORM

This form is to be used for all correspondence after initial filing)

Application Number	09/725,393
Filing Date	November 29, 2000
Inventor(s)	Arnab DAS et al.
Group Art Unit	2112
Examiner Name	Paul R. Myers
Attorney Docket Number	29250-002085/US

## ENCLOSURES (check all that apply)

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Fee Transmittal Form<br><br><input type="checkbox"/> Fee Attached<br><br><input type="checkbox"/> Amendment<br><input type="checkbox"/> After Final<br><br><input type="checkbox"/> Affidavits/declaration(s)<br><br><input type="checkbox"/> Extension of Time Request<br><br><input type="checkbox"/> Express Abandonment Request<br><br><input type="checkbox"/> Information Disclosure Statement<br><br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><br><input type="checkbox"/> Response to Missing Parts/Incomplete Application<br><br><input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Assignment Papers (for an Application)<br><br><input type="checkbox"/> Letter to the Official Draftsperson and _____ Sheets of Formal Drawing(s)<br><br><input type="checkbox"/> Licensing-related Papers<br><br><input type="checkbox"/> Petition<br><br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><br><input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address<br><br><input type="checkbox"/> Terminal Disclaimer<br><br><input type="checkbox"/> Request for Refund<br><br><input type="checkbox"/> CD, Number of CD(s) _____ | <input type="checkbox"/> After Allowance Communication to Group<br><br><input type="checkbox"/> LETTER SUBMITTING APPEAL BRIEF AND APPEAL BRIEF (w/clean version of pending claims)<br><br><input type="checkbox"/> Appeal Communication to Group (Notice of Appeal)<br><br><input type="checkbox"/> Proprietary Information<br><br><input type="checkbox"/> Status Letter<br><br><input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):<br><p style="text-align: center;"><b>-REPLY BRIEF</b></p> |
|---|--|---|

Remarks

## MAIL STOP Appeal Briefs – Patents

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Harness, Dickey & Pierce, P.L.C.	Attorney Name	Gary D. Yacura	Reg. No.	35,416
Signature					
Date	December 21, 2005				

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PATENT  
29250-002085/US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BOARD OF PATENT APPEALS AND INTERFERENCES

Appellants: Arnab DAS et al. **Appeal No.** \_\_\_\_\_  
Serial No.: 09/725,393 Group: 2112  
Filed: November 29, 2000 Examiner: Paul R. Myers  
For: SUB-PACKET ADAPTATION IN A WIRELESS  
COMMUNICATION SYSTEM

**REPLY BRIEF UNDER 37 C.F.R. § 41.41**

December 21, 2005

**MAIL STOP REPLY BRIEF – PATENTS**

U.S. Patent and Trademark Office  
Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Dear Sir:

Appellants respectfully request that the Appeal Board consider the enclosed remarks pursuant to 37 C.F.R. § 41.41, which are filed in response to the Examiner's Answer mailed on October 21, 2005.

**Remarks** begin on page 2 of this Reply Brief.

**REMARKS**

On pages 3 and 6 of the Examiner's Answer, the Examiner submits that a situation in which an input packet is not fragmented, but merely output as a sub-packet as taught by Bruckman (U.S. Patent Publication No. 2002/0051466) allegedly corresponds to the "repeating," of claims 1 and 24. The Examiner also contends that the fragmentation of an input packet into smaller sub-packets as taught by Bruckman allegedly corresponds to the "puncturing," of claims 1 and 24. Appellants disagree.

With regard to FIG. 3 of the present application, at a transmitter, an encoder packet of, for example, 3,072 bits may be turbo-coded at 1/5 rate to produce a channel encoded encoder packet of 15,360 bits. This channel encoded encoder packet may then be punctured and/or repeated to generate multiple (e.g., 4) encoder sub-packets.

In at least one example embodiment of the present invention, puncturing comprises retaining a portion of the bits within the channel coded encoder packet to generate a channel coded encoder sub-packet. In one example, bits within the channel coded encoder packet may be punctured by retaining four out of every six bits. In other words, two out of every six bits may be dropped from the channel coded encoder packet. This example puncturing may generate a channel coded encoder sub-packet having a smaller number of bits than the channel coded encoder packet. For example, with regard to FIG. 3 of the present application, a channel coded encoder packet may include 15,360

bits. In order to generate channel coded encoder sub-packet including 13,824 bits, 1 out of every 10 bits may be dropped.

Moreover, in at least one example embodiment of the present invention, repeating comprises repeating at least a portion of the bits within the channel coded encoder packet to generate a channel coded encoder sub-packet. In one example, each bit may be repeated once to generate a channel coded encoder sub-packet having twice the number of bits as the channel coded encoder packet. For example, with regard to FIG. 3 of the present application, a channel coded encoder packet may include 15,360 bits. In order to generate channel coded encoder sub-packet including 24,576 bits, 3 out of every 5 bits may be repeated.

Puncturing and repeating may be performed separately or in combination with one another to generate a channel coded encoder sub-packet associated with a desired transmission rate.

In covering aspects of the above discussed example embodiment, claim 1, for example, recites "puncturing and/or repeating the channel coded encoder packet to produce a first encoder sub-packet."

As will be appreciated, the fragmenting of Bruckman does not constitute the "puncturing," of claims 1 and 24. To the contrary, the fragmenting of Bruckman merely **fragments or slices** an input packet into multiple smaller packets. Each fragment represents a **portion of the original packet** data, and all fragments must be received to recover the original packet data. On the other hand, as discussed above, "puncturing," includes dropping of a portion of

bits in the channel coded encoder packet to create a channel encoded encoder sub-packet.

Furthermore, the transmission of unique sub-packets collectively representing an input packet, as taught by Bruckman, is clearly not the "repeating," of claim 1, for example.

For at least this reason, Bruckman fails to teach at least, "puncturing and/or repeating," as set forth in claims 1 and 24.

### **CONCLUSION**

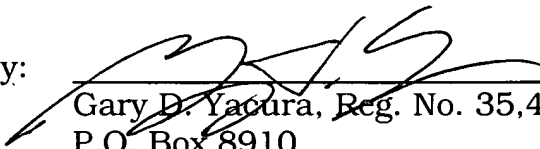
Appellants respectfully request that the Appeal Board consider the above remarks in conjunction with the remarks previously made in the Appeal Brief filed on August 10, 2005, and reverse the Examiner's anticipation and obviousness rejection of claims 1-14 and 16-24.

The Commissioner is authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By:



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